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ABSTRACT

The booklet discusses generalization issues and the use of self-monitoring to promote generalization of articulation treatment. Following an explanation of generalization and its varieties (such as response generalization, stimulus-response generalization, and generalization across time), units cover measurement of generalization, materials, and pre-training. The next unit outlines a program whereby speech clinicians can help their clients to undertake self-monitoring of their speech. Considerations addressed include use of wrist counters vs. paper and pencil checksheets. This is followed by a unit on reinforcers (methods of motivating clients). Each unit is followed by exercises. (CL)

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How to Program Generalization of Articulation Gains Through Self-Monitoring Procedures

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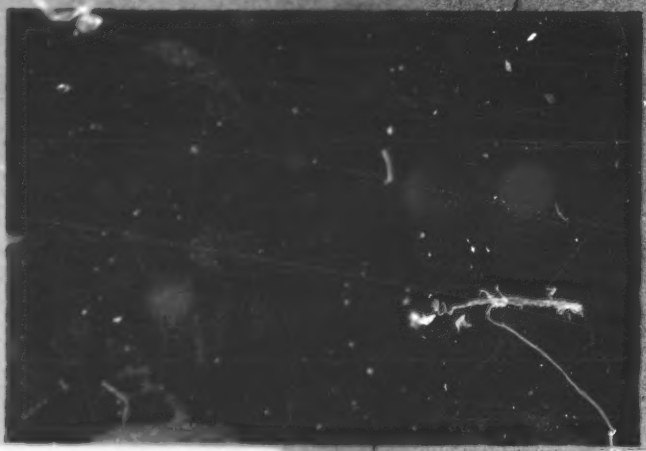

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INTRODUCTION

Generalization is one of the most perplexing problems speech clinicians and researchers face in attempting to modify articulation (cf, Mowrer, 1971). Although a number of techniques and preconstructed programs have been used to effectively modify articulation, the behavioral changes these methods produce are often clinic-bound and limited to structured speech tasks. That is, generalization of a newly-learned articulatory response outside the clinical setting and/or into spontaneous speech is the most serious problem identified by most speech clinicians (Sommers, 1969; Mowrer, 1971; Wing & Heimgartner, 1973). Unfortunately, discussion and experimental research related to generalization in articulation treatment is limited. Therefore, the specific purpose of this book is to discuss various generalization issues and the use of self-monitoring in order to promote the generalization of articulation treatment.

UNIT 1. DEFINITION OF GENERALIZATION

Generalization has been defined as the occurrence of a trained behavior under different nontraining conditions without the scheduling of the same events which were previously scheduled in the training conditions (Stokes & Baer, 1977). The nontraining conditions may be when a particular behavior occurs across subjects, settings, people, behaviors, and/or time. An example of generalization is when a particular sound is being practiced in the clinical setting and the client correctly uses the sound in other environments, such as home, where the behavior was not specifically trained.

Before going further, it is important to understand the varieties of generalization. The literature contains a multitude of terms, many of which describe distinctly different forms of generalization. Costello (1982) has clearly defined four basic types of generalization. These four types are stimulus generalization, response generalization, stimulus-response generalization, and generalization across time. In order to facilitate conceptualization of these varieties, examples of each type of generalization will be described using a hypothetical client. The hypothetical client produces theta (e.g., thin) for /s/. The child is being trained by his speech clinician using pictorial stimuli on a corpus of words. One of the pictures is a bar of soap.

The first variety of generalization, stimulus generalization, can be further divided into two types: generalization across settings and generalization within a stimulus class. Generalization across settings (also referred to as extratreatment, extratherapy, or extra clinic generalization) occurs when a response which has been learned under one set of conditions subsequently occurs in a different setting and in the presence of stimuli that were not present during training, without reinforcement. This is a type of stimulus generalization because the response occurs in the presence of novel (antecedent) stimuli. For example, let's say the child has learned to correctly say "soap" in clinic. Then, when he is taking a bath at home, he sees a bar of soap and again correctly produces the word, generalization across settings has occurred. That is, the newly learned response (correctly producing /s/ in the word "soap") has occurred in the presence of a novel stimulus (the bar of soap) and in a different setting (home).

The second variety of stimulus generalization, generalization within a stimulus class (not including setting generalization) occurs when a newly learned response is emitted to novel stimuli of the same class, which were not present during the original learning sessions. For example, the child has been taught to say

the word "soap" using a specific picture. Then, the clinician brings in a bar of soap and the child correctly produces the word "soap" again. Thus, the new response (soap) is correctly emitted in the presence of a novel stimulus (the actual bar of soap). In this example the stimulus "class" included any type of soap which was not specifically the one used during training.

Another type of generalization, response generalization, occurs when untreated behaviors of a learner are effected by learning a particular behavior during treatment. The distinctive feature approach with children who have multiple articulation errors, is a good example of this goal. One hopes that by teaching a particular feature which a number of misarticulated sounds have in common, the response will generalize to other sounds, not specifically trained. For example, typically a child who misproduces /s/ will also produce /z/ incorrectly. If the child has been trained on only the /s/ sound but then begins to use the /z/ sound correctly, response generalization has occurred.

A third variety of generalization, stimulus-response generalization, occurs when several stimuli which were not present during training have the power to evoke the response within a response class. Stimulus-response generalization is a conceptual type of learning; the client generalizes among stimuli which are similar and discriminates between that stimulus class and other sets of stimuli (Whaley & Malloy, 1971). For example, when the child (described above) produces the /s/ phoneme correctly (i.e., the new response) in all environments under all stimulus conditions, stimulus-response generalization has occurred.

The last type of generalization is generalization across time (also referred to as maintenance). This occurs when the behavior remains in the learner's repertoire over time. For example, this occurs when the child continues to correctly articulate the trained sound in clinic or other settings, over time, following the withdrawl of treatment contingencies.

Generalization can occur spontaneously, as a by-product of treatment, noted by the occurrence of the behavior outside the treatment setting. But the literature indicates that spontaneous generalization often needs to be promoted by an active process of programming and arranging techniques in treatment to promote its occurrence.

EXERCISES

1a) Define Generalization Across Settings.

_____

_____

_____

1b) Give an example of Generalization Across Settings.

_____

_____

_____

2a) Define Generalization Within a Stimulus Class.

_____

_____

_____

2b) Give an example of Generalization Within a Stimulus Class.

_____

_____

_____

3a) Define Response Generalization.

_____

_____

_____

3b) Give an example of Response Generalization.

_____

_____

_____

4a) Define Stimulus-Response Generalization.

_____

_____

_____

4b) Give an example of Stimulus Response Generalization.

_____

_____

_____

5a) Define Generalization Across Time.

_____

_____

_____

5b) Give an example of Generalization Across Time.

_____

_____

_____

UNIT 2. MEASUREMENT

How does one accurately assess the occurrence of generalization? The literature contains a wide variety of measurement methods ranging from reports from "others" that increased intelligibility has occurred to more systematic methods which assess generalization in a variety of new environments including people who are unfamiliar to the child (e.g., Costello & Bosler, 1976). Therefore, when reviewing a study, one must be aware of the specific type of generalization being assessed.

An important issue related to valid measurement is stimulus control. Most behavior is under stimulus control. That is, a particular stimulus or set of stimuli regularly evokes a specific response. The particular stimulus which acquires the power to evoke a response by being present during treatment when the response is reinforced is referred to as a discriminative stimulus (S^D). A good example of stimulus control was demonstrated by Rincover and Koegel (1975). The study was designed to assess generalization across settings in ten autistic children who learned nonverbal imitative tasks in a clinic room. Four of the children did not show any generalization of the behavior outside of the clinic with a stranger. The authors attempted to assess the stimulus control by introducing stimuli from the treatment room to the new setting. The results demonstrated that the first child was responding to the hand movement of the therapist. The second child was selectively responding to the teacher letting go of his hands following an instruction. Child 3 was selectively responding to the initial prompted trial given by each adult. The last child responded only when the table and chairs were present when the verbal instruction was introduced. This study demonstrates that stimulus control may be attributed to a variety of different stimuli. In addition, these may vary widely across children. Therefore, in order to accurately assess if generalization is occurring, the clinician must see how the child is using the sound in his/her natural environment, without any discriminitive stimuli present during training, and in the absence of reinforcement. This can be accomplished through a covert assessment of the client's spontaneous speech. In order to obtain this, the clinician can have family members, friends, or a teacher covertly tape record a conversation with the client (e.g., at the dinner table). Another method of measuring speech is to have a trained observer measure responses.

Trained observers were utilized in an experiment by Koegel and Koegel (1984) in the following manner. Observers, naive to the experimental hypothesis, independently recorded the children's correct/incorrect productions during unstructured spontaneous speech. To be assured that no confounding variables existed, data recorders unfamiliar to the child covertly recorded data in a nontreatment environment (e.g., in the classroom, on the playground, and outside the child's classroom). In each session ten occurrences of the target phoneme were measured. In order to obtain these ten separate data points during the child's unstructured spontaneous conversation, the data recorder engaged in a conversation with each child. Following each utterance made by the recorder a single data point was counted. During each of the child's responses, the first occurrence of the target phoneme in the child's answer was recorded as correct or incorrect. That is, the recorder made an utterance or asked a question, then the first target phoneme in the child's response was recorded. Then, the recorder made a second utterance or asked a second question and the first occurrence of the target phoneme in the child's second response was recorded for the second response, and so on until ten responses were recorded. In instances where the target phoneme did not occur (such as if the child simply answered "no") that particular trial was disregarded and a new question was presented for the trial.

In order to record the responses unobtrusively, the data recorders utilized each finger to represent a question. The data recorders unobtrusively held their fingers in such a way (e.g., bent or straight) that they could later distinguish between the correct vs. incorrect responses. Then, immediately following the conversation, the responses were recorded on a pre-coded data sheet. Thus, the recorder(s) engaged in a conversation with each child and recorded ten occurrences of the target phoneme during unstructured spontaneous conversation. The length of each session varied according to the amount of child and recorder talking time and the length of time it took for the target phoneme to occur.

Social validation measurements may also be helpful for assessing the effectiveness of the program. This can be accomplished by contacting the teacher or parent (or significant other) either by phone or note (see Appendix A) and asking how the child sounds. While this is not an extremely accurate measurement, it does give some indication whether the response is occurring in nontreatment environments. Generalization should be systematically assessed throughout the entire treatment program in addition to pre- and post-treatment measures (including generalization across time).

EXERCISES

1a) What is Stimulus Control?

_____

_____

_____

1b) Give an example of Stimulus Control.

_____

_____

_____

2) What important issues should be considered in order to accurately measure generalization?

_____

_____

_____

UNIT 3. MATERIALS

Now that you understand the preliminary material you are ready to begin your program. First, be sure you have the necessary materials from the following checklist.

[ ] 1. 20 stimulus pictures. The stimulus pictures should contain no written words. In addition, they should be age-appropriate functional vocabulary words (see attached example list for grammar school children.)

[ ] 2. Pencils. One for you and one for each child.

[ ] 3. Data sheet for the clinician to take response data. A simple piece of paper is adequate to accurately record data in order to assess when the client is ready to move to the next step. Data should be taken on a trial by trial (i.e., every response) basis during the training steps.

[ ] 4. Data sheets or counter watch for the child to take data on her/his own responses.

[ ] 5. Functional positive reinforcers.

UNIT 4. PRE-TRAINING

The purpose of pre-training is to prepare the client for the self-monitoring program. It is not the purpose of this chapter to detail the pre-training steps as the focus of this book is on self-monitoring. However, the following steps have been found to be effective in developing pre-requisite skills necessary for the self-monitoring program.

STEP 1: Train the target sound in isolation. (Also see Memoy-Davis (1974) for further details on evoking consonant sounds).

A. The client imitates the sound after the speech clinician. In order to evoke the sound in isolation, verbal, manual, visual and descriptive placement prompts may be necessary. Also, a mirror may be helpful for some clients. Twenty consecutive correct responses is the criterion for this step.

B. Spontaneous production of the target sound. The client must produce twenty consecutive correct productions of the sound in isolation without any model or prompts. In the case of final /r/ remediation, a combination of the various vowels + /r/ must be produced for a total of twenty consecutive correct responses. If a client misarticulates the /r/ sound in both initial and final word positions, the initial /r/ and final /r/ may be treated as separate sounds. The two separate /r/ sounds can be treated consecutively or concurrently. Voiced and voiceless cognates are treated as a single sound.

STEP 2: Train the target sound in words.

A. Imitative production of words containing the target sound. Twenty to thirty pictures (without the written word) containing the target sound(s) are used as stimulus items. When applicable, various word positions and cognates are used. For some example children's word lists please refer to Appendix A. The client is required to produce twenty consecutive different words to pass criterion. If the client is unable to produce the target sound in words, a branch step using the target sound in syllables may be used. Twenty consecutive correct responses is pass criterion. Fail criterion on the target words is five to ten consecutive incorrect responses.

B. Spontaneous production of the target

sound(s) in words. The client is now required to produce the stimulus words (discussed in A above) without a model. Twenty consecutive correct responses is criterion.

STEP 3: Train the target sound in phrases.

A. Imitative production of phrases containing words with the target sound(s). Picture cards from step 2 (above) are used as stimulus items to evoke the phrases. The client produces the phrase after the clinician. At this point if another target sound should occur in the phrase, the child should produce it correctly. That is, from this point on the client is required to produce any occurrence of the target sound correctly during the speech drills. Twenty consecutive correct phrases is the criterion.

B. Spontaneous production of the above phrases. The client produces twenty consecutive correct phrases without a model using the stimulus pictures from step 2 (above). Again, the client is required to produce any occurrence of the target sound in the phrase correctly.

STEP 4: Train the target sound in sentences.

A. Imitative production of sentences with words containing the target sound(s). The clinician makes sentences using the target words. Then, the client repeats the sentences producing all target sounds in the sentence correctly. Twenty consecutive correct responses is criterion.

B. Spontaneous production of sentences containing the target sound(s). The client now makes up sentences about the target words (discussed above). The client must produce twenty errorless sentences in a row to pass criterion. Once the client passes this step (s)he is ready to begin to self-monitor his/her speech.

EXERCISES

1) What is the purpose of pre-training?

_____

_____

2) What is the first step of pre-training?

a. _____

b. _____

3) How many stimulus pictures are adequate for the pre-training steps?

_____

4) What is the third step in the pre-training program?

a. _____

b. _____

5) What is the last step in the pre-training program?

a. _____

b. _____

6) What is the criteria for each of the above steps?

_____

_____

_____

UNIT 5. SELF-MONITORING

Now that the client is able to use the target sound in sentences (s)he is ready to begin self-monitoring his/her speech. The self-monitoring steps are as follow:

Step 1: Train Internal Auditory Discrimination.

A. The speech and language specialist demonstrates a correct vs.incorrect sound in a word. The specialist tells the client that the incorrect --- sounds like --- , and a correct --- sounds like --- .

B. The client is required to produce a correct vs. incorrect sound. The Speech and Language Specialist now says a word containing the target sound to the client. (S)he then asks the client to say the word both the "correct" way then the "incorrect" way. This is repeated with several different words (three to five).

Step 2: Train the Client to Record Correct Responses. The client is now told that (s)he should say the sound correctly ALL of the time. Immediately following each correct response the client should mark a (✓) or a (+) on the data sheet. If the client is using a wrist counter (s)he should be trained to press the button immediately following each correct response.

A. Under supervision of the clinician, the child must demonstrate that (s)he can monitor approximately twenty consecutive correct responses during unstructured conversation. At this point, and the beginning period of B (below), the client's speech may sound very slow and labored. This is a natural phase before the sound becomes "automatic."

B. Now the client is ready to begin monitoring his/her speech outside of the speech class. The client is told that (s)he must be involved in a natural conversation with another person or be reading aloud to another person. While talking, the client should record each correct sound immediately following the production. The data sheets or wrist counters should be carried (or worn) by the client as often as possible. Points may be exchanged for pre-determined reinforcers. Following this step most of the clients should be fully generalized (i.e., using their sounds at least 90% of the time during unstructured conversation outside of speech class) within one to two months. However some clients may learn their sounds as quickly as two to three weeks while a few may take considerably longer. When the client uses his/her sound frequently in conversation (s)he will gradually begin to produce the sound more naturally.

EXERCISE

1) How is Internal Auditory Discrimination trained?

a. _____

_____

b. _____

_____

2) What must the client be told prior to self-monitoring?

_____

_____

_____

3) What must the client demonstrate before self-monitoring outside of the clinic?

_____

_____

_____

4) What type of speech/language activities must a client be involved in during self-monitoring?

a. _____

b. _____

5) Will the client's production of the target phoneme sound unnatural at first?

_____

5) How can the clinician be assured that the client is actually self-monitoring outside of the clinical setting?

_____

_____

_____

UNIT 6. REINFORCERS

Reinforcers are an important part of the program because they keep the clients motivation level high. The best type of reinforcers are those chosen by the client. In our program, we usually let the child earn one or two special largo reinforcers (e.g., going out to pizza) which (s)he chose. In addition we provided smaller intermediary reinforcers. The smaller reinforcers used were "scratch and sniff" stickers and inexpensive toys such as a bookmarker, marbles, animal erasers, or balloons. The steps of an example reinforcement program are outlined below.

	POINTS	REINFORCER
(1)	100	smelly "scratch and sniff" sticker
(2)	200	" "
(3)	300	" "
(4)	400	" "
(5)	500	prize
(6)	600	"scratch and sniff" sticker
(7)	700	" "
(8)	800	" "
(9)	900	" "
(10)	1,000	prize, pre-printed "good work" certificate
(11)	1,200	"scratch and sniff" sticker
(12)	1,400	" "
(13)	1,600	" "
(14)	1,800	" "
(15)	2,000	pizza with a friend

etcetera

It should be noted that the above outline is only very general. Many students need to be reinforced in smaller steps while others need fewer reinforcers to be motivated. Nevertheless, the reinforcement programs should be individually planned for each child to be assured the occurrence of the target behavior will increase. If the client begins to feel that the reinforcer is not "worth" working for, a decrease in his/her responding will occur.

There are a few notes worthy of mentioning here. First, if your school district does not have funding to purchase reinforcers, you may want to ask the parents to contribute some toys that their children would like to earn. Secondly, it is important that the children "earn" the reinforcers for the points (s)he recorded outside of the clinical setting. That is, I had one speech teacher tell me that her client said he didn't want to self-monitor because he didn't want to learn his sound. When she asked him why that was he said that if he learned his sound he wouldn't get to come to speech and earn smelly stickers anymore. She had been giving him stickers simply for "comming to speech class." I suggested that she only give them for self-monitoring practice that was completed outside of the speech class.

Lastly, when the child has been observed to be using his/her sound all or most (at least 90%) of the time outside of speech class, we try to switch the reinforcement to the classroom and home. In order to do this we contact the parents and ask them if they would do or buy something special for the child. Then we ask the parent to tell the child that if (s)he continues to produce the sound as well as (s)he has been (s)he will earn the treat at the end of the week.

At this point, the child should have reached his or her goal. In our program we have a type of maintenance program which also serves as a reinforcer for children who have reached their goal. This is called "Speech Club." The Speech Club meets monthly during lunch time for a party. We bring games and ice cream and the children bring a sack or pot-luck lunch and one friend. By permitting each child to bring a friend there is no type of stigma given to the special education children and the children have more fun. But, as mentioned above, only children who have totally generalized (i.e., reached their IEP goals) are permitted to join the Speech Club. Then, the monthly meetings serve as a reinforcer in addition to permitting the speech-language pathologist to make maintenance checks.

EXERCISES

1. Why are reinforcers important?

_____

_____

2. Describe an example reinforcement program you might use.

Points	Reinforcer

3. Why should reinforcement programs be individually planned for each client?

4. How can reinforcement be incorporated in the classroom and home?

UNIT 7. USE OF WRIST COUNTERS VS. PENCIL AND PAPER CHECKSHEETS

In our original study (Koegel & Koegel, 1984) we used printed sheets of paper containing a grid where checks could be made (see Appendix B). However many of the children preferred smaller sheets of paper (see Appendix B). We now give the children a choice of smaller booklets containing room for 1,000 responses (each of the ten pages contains 100 response boxes) or the full sheet. In addition, we have purchased commercially manufactured wrist counters. The children wear the wrist counters all of the time to monitor their sound(s). The children typically earn more points on the wrist counters as they are easier to carry with them, less conspicuous, and more novel. However, we usually require the children to earn a certain amount of points (usually between 600 to 1,000) before they can use a wrist counter. This way we can make sure the child is serious about making an effort to work on his/her target sound.

EXERCISES

1) What are the advantages of wrist counters?

a. _____

b. _____

c. _____

d. _____

UNIT 8. COMPONENTS OF THE SELF-MONITORING PROGRAM

The following steps appear to be important in the self-monitoring package:

1. THE CLIENT MUST USE THE TARGET SOUND DURING UNSTRUCTURED SPONTANEOUS SPEECH. This program is designed to promote generalization of the target sound into and during unstructured spontaneous speech. The client is NOT to set a certain time aside each evening to practice speech. In addition, the client is NOT to practice the target sound in a drill type manner, such as saying words or sentences with the target sounds. The client must use the target sound in natural speaking situations which may include conversation and reading.

2. CORRECT RESPONSES MUST BE RECORDED. The responses must be recorded on a sheet of paper or a wrist counter. This is the only way the clinician can be sure the child is indeed monitoring his/her speech.

3. SELF-MONITORING MUST BE PROGRAMMED INTO THE NATURAL ENVIRONMENT. The client should only receive rewards for practice OUTSIDE of the speech class. This is important because the client already produces the target sound correctly in the speech class. Now it is time to concentrate on the children's natural environments. Monitoring within the speech classroom is simply to be assured that the client is monitoring accurately.

4. RANDOM CHECKS WITH SIGNIFICANT OTHERS TO BE SURE THE CHILD IS ACTUALLY MONITORING. It is important to check with parents and teachers occasionally to be sure the child is actually monitoring during unstructured conversation and not simply marking points without talking or repeating a word with the target sound over and over. Significant progress will only occur if the child is monitoring during unstructured conversation.

5. MAKE SURE THE REWARD IS "WORTH" WORKING FOR.

An increase in correct responding should occur if the reward is effective. The easiest way of insuring that the child really wants to work for the reward is by having the child pick his/her own reward(s). If you notice that a child is decreasing his/her rate of monitoring you should evaluate your reinforcement program.

EXERCISES

Name the five critical components of the self-monitoring program.

1. _____
   _____
   _____

2. _____
   _____
   _____

3. _____
   _____
   _____

4. _____
   _____
   _____

5. _____
   _____
   _____

UNIT 9. BEST CANDIDATES FOR THE PROGRAM

This self-monitoring program has been very effective with children who demonstrate one to three articulatory errors, either consistently or inconsistantly. The children who participated in the program produced /θ/ for /s/ and /ð/ for /z/ and/or w/r in all word positions. In the case of children who misarticulated /s/ /z/ and /r/, one sound (for example /r/) was worked on first then the second sound. Our pilot data suggests that the program is not as effective when both sounds were worked on simultaneously. Specifically, the children had difficulty mastering the pre-training steps when required to produce both sounds correctly. To this point, the program has not been used with children who have more than three sounds (i.e., /s/, /z/, and /r/) in error. However, it seems likely that this program would also be effective with clients who have more severe articulation difficulties. This is an area worthy of further research.

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FOOTNOTE

Preparation of this manual was supported by the California State Department of Education, Contract No. 42-03651-3008-00-83. However the opinions expressed herein do not necessarily reflect the position or policy of the Department of Education, and no official endorsement by the Department should be inferred. Further information may be obtained from the authors at Social Process Research Institute, University of California, Santa Barbara, California 93106.

TABLE A

Words containing /s/ and /z/ (example list)

newspaper	eyes	scissors	sun
dogs	lettuce	toes	pencil
nose	basket	slide	puzzle
cookies	lizard	magazine	zoo
lipstick	snake	blouse	skirt
classroom	books	ice cream	glass
sandwich	zipper	zebra	cheese
spider	pants	sweater	

Example list of words containing /r/ in all word positions

butter	run	hamburger	rope
drinking	scrathing	summer	radio
rabbit	four	paper	rake
girl	brush	room	bear
car	computer	car	rat
record-player	roof	giraffe	ring
hair	rollerskate	red	ear
	bird	rest	road

APPENDIX A: Note to Parents

Date

Dear Parent:

In order to assess the effectiveness of my speech program I would like to know how (child's name) is using his/her (child's sound) sound at home. I would appreciate it if you could pay special attention to your child's speech and then check the appropriate box below. Please return this note with your child within the next 3 days.
Thank you very much.

[ ] I have noticed no change in my child's speech.
[ ] My child has begun to use his/her sound correctly at home.
[ ] My child uses his/her sound correctly all or almost all) of the time.

Comments? _____

APPENDIX A (Continued) Note to Teacher

Date

Dear Teacher:

In order to assess the effectiveness of my speech program I would like to know how (child's name) is using his/her (child's sound) sound in class. Would you please pay special attention to his/her sounds, check the appropriate box below, then return this note to me within 5 days.
Thank you very much.

[ ] I have noticed no changes in the student's speech
[ ] The student has begun to use his or her sound correctly
[ ] The student uses his/her sound correctly all (or almost all) of the time.

Comments? _____

APPENDIX A (Continued) Note to Parents (Spanish)

Fecha

Padres:

En orden de evaluar lo effectivo de mi programa de lenguaje me gustaria saber como (nombre del alumno) está usando su (sonido del alumno) sonido en casa. Les agradesco si pueden poner atención especial al lenguaje de su hijo/hija y luego marque la caja que aplique abajo.

Muchas Gracias,

[ ] No he notado ningún combio en el lenguage de mi niño.
[ ] Mi niño/niña ha empezado a usar su sonido bien en casa.
[ ] Mi niño/niña ha estado usando su sonido bien todo (o casi todo) el tiempo.

Comentarios? _____